BRIEF INTRODUCTION TO THE DEPTH MEASUREMENT MICROSCOPE 2034-CIL-300-ZX

To set the correct working distance between the end of the lens and the object to be measured, the two knurled screws to the sides (figure 1) first have to be unscrewed a little.

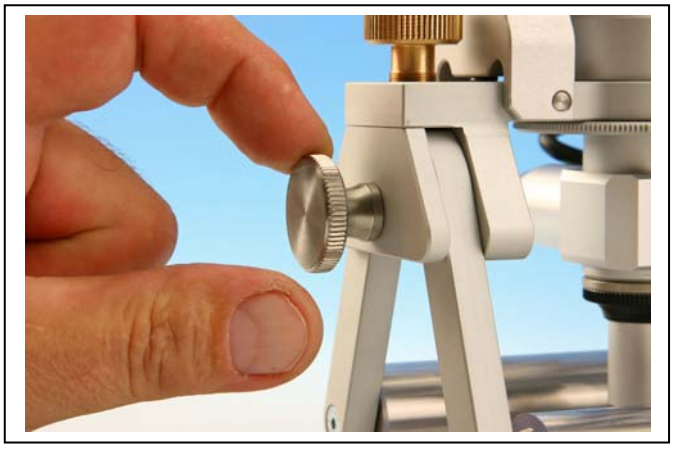

Fig. 1

Unscrewing the knurled screws to the sides

The bronze knurled screw (figure 2) is used to change the distance between the base rollers. To change the distance it can help if you lift up the equipment slightly.

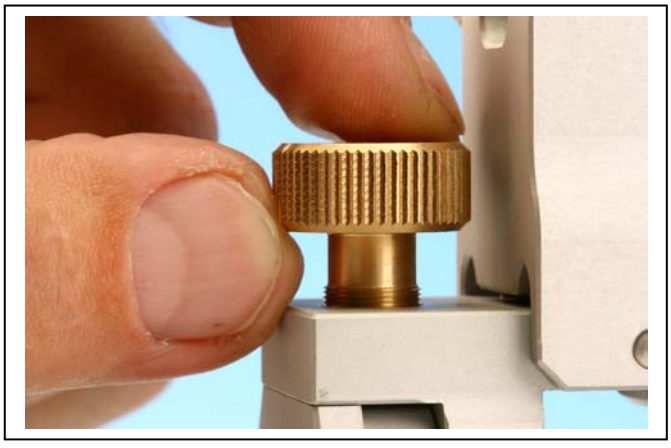

Fig. 2

Changing the distance between the rollers using the bronze knurled screw

Never attempt to change the distance when the knurled screws have been tightened up, since this will damage the toothing.

PeplerOptics
10 Broomfield Lane, Hale, Altrincham, Cheshire, SK10 4RX, UK
Tel: +44 (0)1625 541336 Fax: +44 (0)1625 861445 Email: sales@pepleroptics.com

www.pepleroptics.com

When you have set the working distance to about 5 mm (figure 3) you can roughly focus the equipment quite quickly by pulling the fine focus to the side.

Fig. 3

Pulling the fine focus to the side to make a quick rough focus.

IMPORTANT:

The body is absolutely free of play laterally, to ensure an accurate depth measurement. There is only a slight backlash in the thread. Please therefore note the following:

When you have the object to be measured in focus then turn the optics above the upper focal point. Next, start to focus downwards again and so cancel the backlash. When you have registered the upper point, set the dial gauge to zero and slowly focus downwards again to the lower measuring point.

The user should begin by practicing this, and should carry out the measurements several times until he/she has a "feel" for the speed and the presentation in the upper and lower areas.

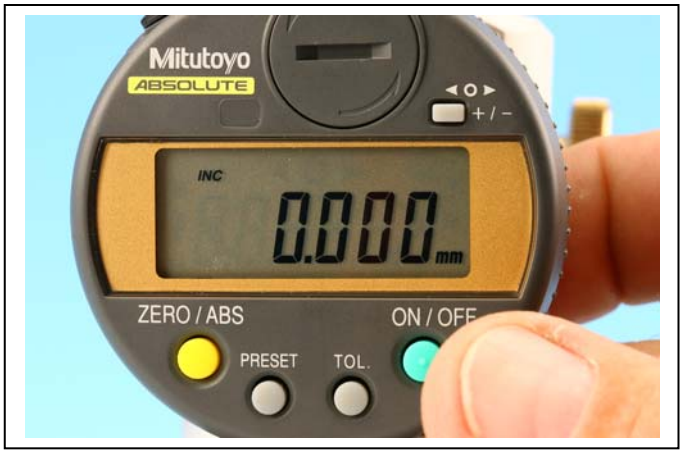

Fig. 4

Setting the dial gauge to zero.

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When measuring the depth of objects for which both (the upper and lower points of focus) do not appear in the viewing field then you will need to use the X-displacement to find the point you want to focus.

Fig. 5

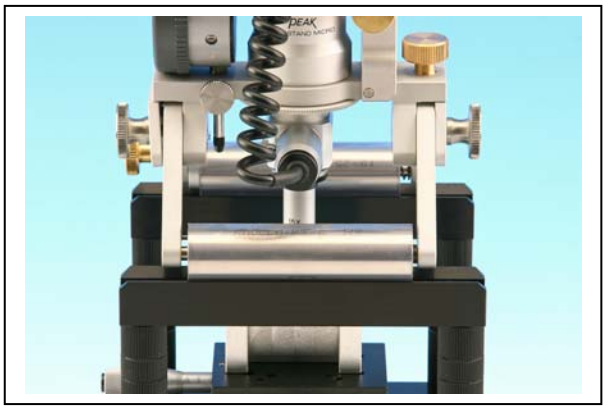
Lateral shifting when the focus points are some distance apart.

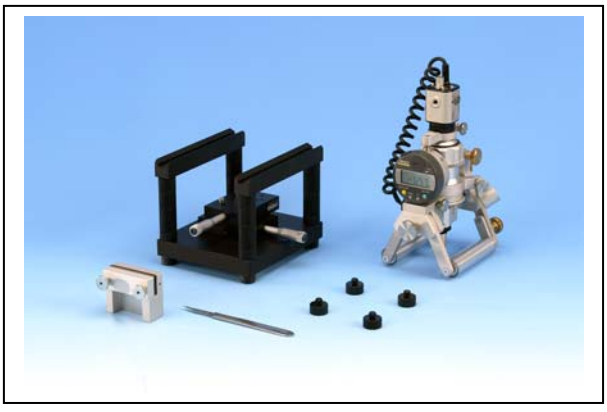
This means that, when you have captured the upper point and set the dial gauge to zero then you use the X-displacement to move the lens to the area of the lower focus point.

The battery box supplied for the coaxial lighting has a dimmer. This is useful where the material being studied is strongly reflective. Please contact us if you have any other questions.

OPTION:

The depth measurement microscope can be retrofitted at any time with an analog CCD camera or USB 2.0 camera with or without measurement software. A stand with an XY measurement table or positioning table is also available.





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